REMARKS

In view of the above amendments and following remarks, reconsideration and further examination are respectfully requested.

I. Claim of Priority

Applicants again respectfully request that the claim of foreign priority under 35 U.S.C. §119 be acknowledged by the Examiner.

Further, Applicants would like to point out that the Notice of Acceptance mailed on July 28, 2005 acknowledges (i) the claim of foreign priority, (ii) that the International Application along with an English translation thereof was received on March 25, 2005, and (iii) that the foreign priority document was received on March 25, 2005.

As a result, acknowledgement of the above-mentioned claim of foreign priority is respectfully requested.

II. Amendments to the Claims

Independent claims 24, 31 and 39 have been amended to clarify features of the invention recited therein and to further distinguish the present invention from the references relied upon in the rejections discussed below.

Support for these amendments can be found, at least, on pages 25 and 26 of the previously filed substitute specification.

III. 35 U.S.C. § 103(a) Rejection

Claim 24-46 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Schoenfeld, Ku and the Admitted Prior Art (APA). This rejection is respectfully traversed. However, in order to avoid further delay in the prosecution of the present application, independent claims 24, 31 and 39 have been further amended to include additional limitations. This rejection is believed to be clearly inapplicable to claims 24, 31 and 39 and the claims that depend therefrom for the following reasons.

Independent claim 24 recites a data transmission device connected to a connected device and connected to a ring-type data transmission network and for electrically communicating with other devices of the ring-type data transmission network via a transmission line in a unidirectional manner, such that the data transmission device receives an electric signal only from a preceding device of the ring-type data transmission network and the data transmission device transmits an electric signal only to a successive device of the ring-type data transmission network, the connected device not being any of the other devices (including the preceding device, and the successive device) of the ring-type data transmission network. In addition, claim 24 recites that a processing section receives data from the connected device, converts the data received from the connected device into a predetermined protocol, and transmits the converted data received from the connected device to a transmission section, and the processing section receives and processes data output from the reception section.

Claim 24 also recites that the reception section detects a cessation of the electric signal sent from the preceding device, such that, when the reception section detects the cessation, (i) the power supply section stops supplying power to the processing section, the reception section, and

the transmission section, (ii) the reception section stops operating, and (iii) the transmission section stops operating and stops transmitting the electric signal converted from the result of the processing by the processing section to the successive device.

Schoenfeld, Ku and the APA, or any combination thereof fails to disclose or suggest the above-mentioned distinguishing limitations, as recited in claim 24.

Rather, Schoenfeld merely teaches a buffer system 304 that includes a clock enable circuit 300 and high speed buffers 200, 204 and 208 (see Fig. 3 and col. 3, lines 26-30), wherein the clock enable circuit 300 and the high speed buffers 200, 204 and 208 are connected in a parallel-type configuration (i.e., not in a ring) (see Fig. 3). In addition, Schoenfeld teaches that the clock enable circuit 300 receives a CKE signal and produces an internal clock enable signal CKEINT for enabling and disabling (i.e., powering on and powering off) the high speed buffers 200, 204 and 208 (see Figs. 3 and 4, and col. 3, lines 35-39 and 46-56). Specifically, Schoenfeld teaches that when the CKE signal transitions from high to low, the clock enable circuit 300 produces the internal clock signal CKEINT to disable the high speed buffers 200, 204 and 208 (see col. 3, lines 29-34).

Thus, in view of the above, it is clear that Schoenfeld teaches that, within the buffer system 304, the clock enable circuit 300 and the high speed buffers 200, 204 and 208 are connected in a parallel-type arrangement, but fails to disclose or suggest the data transmission device connected to a ring-type data transmission network and for electrically communicating with other devices of the ring-type data transmission network via a transmission line in a unidirectional manner, as recited in claim 24.

Furthermore, even if the clock enable circuit 300 and the high speed buffers 200, 204 and 208 of Schoenfeld are compared to the data transmission device and the other devices, as recited

in claim 24, the communication structure of Schoenfeld cannot be equated with the communication structure required by claim 24, because Schoenfeld fails to disclose or suggest the data transmission device connected to the ring-type data transmission network and for electrically communicating with other devices of the ring-type data transmission network via a transmission line in a unidirectional manner, as recited in claim 24. Further, Applicants submit that because of their structure, the clock enable circuit 300 and the high speed buffers 200, 204 and 208 of Schoenfeld cannot be adopted into a ring-type network electrically communicating in a unidirectional manner, as required by claim 24.

Additionally, in view of the above, it is evident that Schoenfeld teaches that the buffer system 304 includes a clock and high speed buffers, but fails to disclose or suggest that the processing section (of the data transmission device) receives data from the connected device (i.e., the device that is not of the ring-type data transmission network), converts the data received from the connected device into a predetermined protocol, and transmits the converted data received from the connected device to a transmission section, and the processing section receives and processes data output from the reception section, as recited in claim 24.

In other words, if the clock and high speed buffers of Schoenfeld are compared to the data transmission devices of the ring-type network of claim 24, as suggested in the present rejection, then it is clear that Schoenfeld fail to disclose or suggest that the processing section (of the data transmission device of the ring-type network) receives data from the connected device (i.e., the device that is not part of the ring-type network), converts the data, and transmits the converted data, as required by claim 24.

Moreover, Applicants submit that, because Schoenfeld fails to disclose or suggest the above-mentioned structure of the communication network, as required by claim 24, Schoenfeld

also fails to disclose or suggest that when the reception section detects the cessation of the electric signal sent from the preceding device (of the ring-type data network), the data transmission device enters a "power down mode" (i.e., power is no longer supplied to the processing, reception and transmission sections and the reception and transmission sections stop operating), as required by claim 24.

Now turning to the Ku reference, the Applicants note that Ku teaches that a pipelined circuit is shut down when shut-down criteria is met, such that inactivity in a reception section of a device is considered a shut-down criteria (see col. 1, lines 15-37, col. 1, line 55 to col. 2, line 27, col. 3, lines 14-24 and 54-62, and col. 4, lines 44-65).

In view of the above, it is submitted that, even though Ku teaches shutting down a pipelined circuit when inactivity is detected, Ku still fails to disclose or suggest that the processing section (of the data transmission device) receives data from the connected device (i.e., the device that is not of the ring-type data transmission network), converts the data received from the connected device into a predetermined protocol, and transmits the converted data received from the connected device to a transmission section, and the processing section receives and processes data output from the reception section, as recited in claim 24.

Based on the structure required by claim 24, the data transmission device connected to the ring-type data transmission network can shift to a zero-power mode in coordination with the other data transmission devices of the ring-type network. Therefore, even though Schoenfeld and Ku suggest that a power-down mode is entered when certain conditions are satisfied, Schoenfeld and Ku still fail to disclose or suggest the result of the structure required by claim 24, such that the data transmission device connected to the ring-type data transmission network can shift to a zero-power mode in coordination with the other data transmission devices of the ring-

type network. In addition, even if, as suggested in the present rejection, that ring-topology networks are known in the art, the above-mentioned result of the structure required by claim 24 would not have been obvious in view of the combination of Schoenfeld and Ku, because Schoenfeld and Ku do not disclose or suggest the structural limitations of the data transmission device.

Therefore, because of the above-mentioned distinctions it is believed clear that claim 24 and claims 25-30 that depend therefrom would not have been obvious or result from any combination of Schoenfeld, Ku and the APA.

Furthermore, there is no disclosure or suggestion in Schoenfeld, Ku and the APA or elsewhere in the prior art of record which would have caused a person of ordinary skill in the art to modify Schoenfeld, Ku and the APA to obtain the invention of independent claim 24. Accordingly, it is respectfully submitted that independent claim 24 and claims 25-30 that depend therefrom are clearly allowable over the prior art of record.

Amended independent claims 31 and 39 are directed to a system and a method, respectively and each recite features that correspond to the above-mentioned distinguishing features of independent claim 24. Thus, for the same reasons discussed above, it is respectfully submitted that independent claims 31 and 39 and claims 32-38 and 40-46 that depend therefrom are allowable over the prior art of record.

IV. Conclusion

In view of the above amendments and remarks, it is submitted that the present application is now in condition for allowance and an early notification thereof is earnestly requested. The Examiner is invited to contact the undersigned by telephone to resolve any remaining issues.

Respectfully submitted,

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